

## REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

The paragraph at the top of page 36 of the application has been amended to refer to the ribs 228a. Accordingly, withdrawal of the objection to the disclosure is respectfully requested.

By this Amendment, Claims 2 and 5 are canceled, and Claims 15-17 are added. Thus, the claims currently pending in this application are Claims 1, 3, 4 and 6-17. Claims 1 and 11 are the only independent claims.

Claim 1 is directed to a syringe having a distal end portion to which first and second female connectors are adapted to be alternatively connected, with the outer peripheral surface of the second female connector being provided with a female-side screw engagement portion. The syringe comprises a mouth portion at the distal end portion of the syringe which possesses a male taper portion adapted to be fitted in a bore portion of the first female connector and a bore portion of the second female connector, with the mouth portion possessing a passage for permitting a liquid to pass therethrough. A lock adapter is provided at the outer peripheral portion of the mouth portion and is relatively movable in the axial direction of the mouth portion. The inner peripheral surface of the lock adapter possesses a male-side screw engagement portion for making screw engagement with the female-side screw engagement portion on the outer peripheral surface of the second female connector. In addition, the lock adapter is adapted to be retracted to a retraction position on the proximal end side when the male taper portion of the mouth portion is fitted into the bore portion of the first female connector.

The Official Action sets forth a rejection of independent Claim 1, and various dependent claims, based on the disclosure in U.S. Patent No. 5,047,021 to *Utterberg*. This document discloses a male luer lock medical fitting that includes a nozzle 300 together with a locking ring 320 that is adapted to be assembled around the nozzle 300. The nozzle 300 includes an annular locking ridge 308 that serves to restrain longitudinal forward motion of the ring 320 relative to the nozzle 300 so that the forwardmost position of the locking ring 320 is as shown in Fig. 6.

One of the differences between the syringe disclosed in the present application and the device disclosed in *Utterberg* involves the way in which the lock adapter is restrained from rotating about the mouth portion of the syringe such as described at, for example, the bottom half of page 36 of the present application. Claim 1 is amended to recite this aspect of the syringe. By restraining the lock adapter from rotating about the mouth portion, it is possible to grip the syringe with one hand and rotate the syringe to connect to, for example, the female connector. With this arrangement, it is not necessary to grip the lock adapter because the lock adapter is restrained from rotating about the mouth portion. Thus, the rotation of the syringe has associated with it rotation of the lock adapted. Such an arrangement has useful application in, for example, the case of a small syringe possessing a relatively small lock adapter. With a relatively small lock adapter, it might be somewhat difficult to grip the small lock adapter to connect the syringe with the female connector. By restraining rotation of the lock adapter about the mouth portion, it is not necessary to grip the lock adapter for purposes of connecting the syringe with, for example, the female connector.

The particular fitting disclosed in *Utterberg* includes the locking ring 320 that is assembled around the nozzle 300. However, there is no disclosure in *Utterberg* that the locking ring 320 is restrained from rotating about the nozzle 300, or should be configured to be restrained from rotating about the nozzle 300. It is thus respectfully submitted that the syringe recited in independent Claim 1 is patentably distinguishable over the disclosure in *Utterberg*.

The Official Action also sets forth a rejection of independent Claims 1, 11 and 13 based on the disclosure in U.S. Patent No. 5,609,584 to *Gettig et al.* This document discloses, and illustrates in Figs. 10 and 11, an adapter 200 adapted to be used in connection with the fittings 12, 112 illustrated in Figs. 1-9. However, like the device disclosed in *Utterberg*, the system described in *Gettig et al.* is not configured so that the adapter 200 is restrained from rotating about the portion 136 of the fitting 112. Claim 1 is thus also patentably distinguishable over the disclosure in *Gettig et al.*

Independent Claim 11 defines a cap to be mounted to a mouth portion of a syringe outer hollow cylinder, with the syringe outer hollow cylinder comprising the mouth portion projecting at the distal end of the syringe outer hollow cylinder and provided at a distal end portion thereof with a male taper portion, and a lock adapter provided at the outer peripheral portion of the mouth portion, with the lock adapter being relatively movable along the axial direction of the mouth portion and being provided on its inner peripheral surface with a male-side screw engagement portion. The cap comprises a bottomed hollow-cylindrical cap main body comprising a bore portion, and a female-side screw engagement portion formed on an outer peripheral portion of the cap main body for screw engagement with the male-side screw

engagement portion. A packing formed of an elastic material is provided in the bore portion of the cap main body, and at least a part of the inner peripheral surface of the bore portion makes close contact with the male taper portion over the entire circumference when the cap main body is mounted to the mouth portion.

The Official Action observes that the protective cap 240 shown in Fig. 11 of *Gettig et al.* corresponds to the claimed cap recited in Claim 11 (and Claim 13 which depends from Claim 11). However, as claimed herein, at least a part of the inner peripheral surface of the bore portion of the cap makes close contact with the male taper portion of the mouth portion of the syringe over the entire circumference when the cap main body is mounted to the mouth portion. In *Gettig et al.*, a portion of the inner peripheral surface of the bore portion in the protective cap 240 does not make close contact with the male taper portion of the syringe over the entire circumference when the cap main body is mounted to the mouth portion. As shown in Fig. 11, a portion of the inner peripheral surface of the protective cap 240 engages the nozzle portion 206 of the adaptor 200, but does not make close contact with the male taper portion of the syringe over the entire circumference when the cap main body is mounted to the mouth portion.

Claim 11 is further distinguishable in that they also recite that the lock adapter is restrained from rotating about the mouth portion of the syringe. As noted above, this is not disclosed in *Gettig et al.*. Thus, independent Claim 11 is further distinguishable over the disclosure in *Gettig et al.*.

The Official Action states that the method of Claim 14 would have obvious in light of the combined disclosures in *Gettig et al.* and U.S. Patent No. 6,632,199 to *Tucker et al.* However, the method recited in Claim 14 involves use of the cap

recited in Claim 11 which, as noted above, is configured so that at least a part of the inner peripheral surface of the bore portion of the cap makes close contact with the male taper portion of the mouth portion of the syringe over the entire circumference when the cap main body is mounted to the mouth portion of the syringe. As explained above, this is not disclosed in *Gettig et al.* The disclosure in *Tucker et al.* is similarly lacking. In addition, Claim 14 is amended to recite that the lock adapter is restrained from rotating about the mouth portion and is thus distinguishable of the disclosure in *Gettig et al.* for reasons similar to those noted above. In addition, *Tucker et al.* does not make up for this additional distinguishing aspect of the claimed subject matter. Accordingly, withdrawal of the rejection based on a combination of the disclosures in *Gettig et al.* and *Tucker et al.* is respectfully requested.

The new dependent claims define features of the disclosed subject matter that contribute to the lock adapter being restrained from rotating about the mouth portion. These additional distinguishing aspects are not disclosed in the references relied upon in the Official Action.

Early and favorable action with respect to this application is respectfully requested.

Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful

in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: January 22, 2007

By:



Matthew L. Schneider  
Registration No. 32814

P.O. Box 1404  
Alexandria, VA 22313-1404  
703 836 6620